

We Claim  
~~PATENT CLAIMS~~

1. Method for removing ATM cells (2, 6) from an ATM communications device wherein ATM cells (2, 3, 5, 6) are respectively allocated in pluralities to a common frame (8, 9), whereby all ATM cells (2...6) of a frame (9) whose first ATM cell (2) is in the waiting list (1) are removed from a waiting list (1) for the administration of a sequence of ATM cells (2, 3, 4, 5, 6), characterized in that a frame start identifier is stored that identifies the ATM cell (4) in the waiting list (1) that immediately precedes the first ATM cell (2) of the frame; and in that the frame start identifier is called before the removal of the ATM cell (2) or, respectively, of the ATM cells (2, 6) of the frame (9).

2. Method according to claim 1, characterized in that the frame (9) is the frame beginning farthest toward the back in the waiting list (1).

3. Method according to claim 1 or 2, characterized in that following  
15 ATM cells (3, 7) of the frame (9) up to and including the last ATM cell (3) of the  
frame (9) are removed upon arrival or following arrival at the waiting list (1).

4. Method according to one of the preceding claims, characterized in that, when the first ATM cell of the frame is immediately preceded by a last ATM cell of a different frame, the frame start identifier references this ATM cell.

5. Method according to one of the preceding claims, characterized in that, when the first ATM cell (2) of the frame (9) is immediately preceded by an individual ATM cell (4) not allocated to a frame, particularly an OAM cell or a RM cell, the frame start identifier references this ATM cell (4).

25           6. Method according to one of the claims 1 through 5, characterized in  
that, when the fist ATM cell of the frame is followed in the waiting list by an  
individual ATM cell not allocated to any frame, particularly an OAM cell or ARM

cell, a predetermined inhibit value is stored instead of the frame start identifier, so that the ATM cells of the frame cannot be removed from the waiting list.

7. Method according to claim 6, characterized in that the inhibit value is stored upon arrival of the individual ATM cell at the waiting list and/or when this cell is added to the waiting list.

8. Method according to one of the claims 1 through 7, characterized in that a check is carried out at or following the attaching of an arrived ATM cell to the end of the waiting list to see whether the ATM cell is a matter of a last cell of a frame; and in that, as warranted, a value that references this ATM cell is stored as the frame start identifier, so that the ATM cells of the appertaining frame cannot be removed from the waiting list.

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